



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Docket No. 12770US01)

In the Application of:

Doyle et al.

Serial No.: 09/273,673

Filed: March 22, 1999

Express Mail No. EV 729160440 US

For: Computer Apparatus and Method for  
Trading and Clearing Futures Contracts to  
Accommodate a Variable Sensitivity  
Related to the General Level of Interest  
Rates

Date: April 11, 2006

Examiner: Clement Graham

Group Art Unit: 3628

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reasons stated on the attached sheets.

Respectfully submitted,

Date: April 11, 2006

By: Christopher N. George  
Christopher N. George  
Reg. No. 51,728  
Attorney for Applicants

McANDREWS, HELD & MALLOY, LTD.  
500 West Madison Street, 34th Floor  
Chicago, Illinois 60661  
Telephone: (312) 775-8000  
Facsimile: (312) 775 - 8100

## **REMARKS**

The present application includes pending claims 1-18 and 20, all of which have been rejected. The Applicants respectfully submit that the claims define patentable subject matter.

Claims 1-18 and 20 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins et al. (U.S. Patent No. 6,247,000) in view of Daughtery (U.S. Patent Pub. No. 2001/0056392) and further in view of Mosler et al. (U.S. Patent No. 6,304,858). The Applicants respectfully traverse this rejection at least for the reasons previously set forth during prosecution and the following:

### **I. A Brief History of the Prosecution**

Claims 1-18, and 20 have been previously allowed by the Examiner. *See* December 2, 2002 Office Action at page 1; May 1, 2003 Advisory Action at page 1; and January 9, 2003 Amendment at page 3. Claim 19 had been rejected, so claim 19 was cancelled by the Applicant to proceed with allowance. The Hawkins, Daughtery and Mosler references had been cited to and considered by the Examiner in obtaining allowance of claims 1-18 and 20. The Hawkins and Mosler references were disclosed to the Examiner in an IDS filed by the Applicant's attorneys on January 9, 2003, and re-sent to the Examiner on May 7, 2003. The parent patent of the Daughtery application was previously relied upon by the in an office action mailed on March 18, 2002, which was overcome by the Applicant. Then, in 2003, the application was selected for a second tier review. In spite of numerous status inquiries and phone calls, a next office action was not issued until July 8, 2005, now rejecting claims 1-18 and 20 in view of the previously discussed references. *See* March 24, 2005 Status Inquiry at pages 1-2. The Office Action mischaracterizes these references and arguments as new references and arguments found through further search. *See* July 8, 2005 Office Action at page 2.

### **II. Hawkins Does Not Teach or Fairly Suggest Claims 1-18 and 20**

As the Examiner has agreed, Hawkins does not teach a convex futures contract or the use of a convex futures contract. *See* January 12, 2006 Office Action at page 3; July 8, 2005 Office Action at page 3; and October 7, 2005 Amendment at page 10. Additionally, Hawkins does not teach or suggest a tick value, a flexible or variable tick value, or an update of a tick value for a convex futures contract. Furthermore, as the Examiner has noted, Hawkins does not teach applying an actual tick value to a difference between the trade price data and the settlement price

and triggering a computer-assisted transfer of the amount of money. *See id.* Hawkins has no base tick value for a convex futures contract, no expiration time for the convex futures contract, no computing of a discount factor from settlement price, and no determination of actual tick value from discount factor and base tick value. These limitations are recited in claims 1-18 and 20. Since Hawkins enables easier communication between brokers but does not perform any calculations or execute any trades itself, there is no fair suggestion in Hawkins to use, update, or otherwise modify a tick value with respect to a convex futures contract.

## **II. Daughtery Does Not Teach or Fairly Suggest Claims 1-18 and 20**

Daughtery mentions use with forward or futures contracts but not the novel convex futures contracts developed by the Applicant. Daughtery uses a standard expiring option premium algorithm to discount the effects of time to price a purchased and sold option. *See* October 7, 2005 Amendment at page 11. The tick variable of Daughtery houses the standard dollar price movement based on time until expiration of the option. *See id.* The tick value of Daughtery is not a computed, changing value for the transaction. *See id.* The tick value of Daughtery does not include a base tick value and a computed actual tick value, as recited in the pending claims of the present application. The glossary of Daughtery provides no information to substantiate a discount factor calculation. *See id.* Thus, Daughtery does not teach or fairly suggest the limitations of claims 1-18 and 20.

As the Examiner states, Hawkins and Daughtery do not teach a method of computing a discount factor from the settlement price and determining an actual tick value by applying the discount factor to the base tick value. *See* January 12, 2006 Office Action at page 3; July 8, 2005 Office Action at page 3; and October 7, 2005 Amendment at page 11. Additionally, as shown above and illustrated by the references themselves, the references do not suggest this and other limitations of the claimed invention.

## **III. Mosler Does Not Teach or Fairly Suggest Claims 1-18 and 20**

Mosler relates to trading a standardized contract. *See* October 7, 2005 Amendment at pages 11-12. Mosler discusses an interest rate swap, where two parties agree to make payments to each other to insulate a party from changing interest rates. *See* October 7, 2005 Amendment at page 12. In Mosler, a net present value is an interest rate or notional cash flow. *See id.* The net present value is used as a model price and not as a factor, such as a discount factor, used in a

calculation of an actual tick value and amount of money to clear the convex futures contract. *See id.* The model price becomes the settlement price. *See id.*

A discount value is not determined from the settlement price in Mosler. *See id.* Additionally, no tick value, let alone a base and an actual tick value, is found in Mosler. *See id.* Furthermore, the model pricing of Mosler does not teach or suggest determining the amount of money to be transferred. *See id.* Thus, Mosler does not teach or fairly suggest the limitations of claims 1-18 and 20.

**IV. A Combination of the References Does Not Render Claims 1-18 and 20 Unpatentable**

None of the references teach a variable tick value, wherein the variable tick value changes based on a daily closing value for the futures contract. Additionally, neither Hawkins, Daughtery, nor Mosler discloses the method of transferring funds based on the settlement amount to trade the futures contract. The combination does not teach or suggest computing a discount factor from the settlement price, determining an actual tick value by applying the discount factor to the base tick value, and specifying an amount of money a clearing entity must transfer between a buyer and a seller for clearing a convex futures contract by applying the actual tick value to a difference between trade price data and the settlement price.

Additionally, the Office Action misrepresents the teaching and motivation found in the Hawkins, Daughtery and Mosler references. *See* January 12, 2006 Office Action at pages 3-10; and July 8, 2005 Office Action at pages 3-8. Rather than making very general statements apart from the references themselves, establishing a *prima facie* case of obviousness under section 103 requires a suggestion to combine and the presence of all claimed elements in the combination and not just a general goal of greater capabilities. *See* MPEP 2143 and October 7, 2005 Amendment at page 13.

The Office Action states that “obviousness is not determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments.” *See* January 12, 2006 Office Action at page 10. However, the Applicants submit that “[t]he ultimate determination of patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence.” *See* MPEP 2142 and *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992) (emphasis added). The teaching or suggestion to make the claimed combination and a reasonable expectation of success must both

be found in the prior art, not in the applicant's disclosure and the prior art references must teach or fairly suggest all the claim limitations. *See* MPEP 2143. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *See* MPEP 2143.01 and *In re Mills*, 916 F.2d 680 (Fed. Cir. 1990) (emphasis in original). Without some objective reason to combine the teachings of prior art references, the mere fact that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness. *See* MPEP 2143.01 and *Ex parte Levingood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

At least for the reasons given above, the Office Action has not established a *prima facie* case of obviousness with respect to claims 1-18 and 20. The additional limitations recited in dependent claims 2-15 and 17, such as limitations relating to generation and display of a cumulative price quote or price for a floor option, communicating data to a second computer system, publication, conveying information, etc., are also not taught or fairly suggested by the cited art. The Applicants respectfully submit that these claims should be in condition for allowance at least for the reasons discussed above.

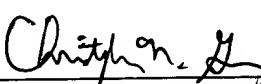
#### V. Conclusion

The Applicants respectfully submit that the claims of the present application should be in condition for allowance at least for the reasons discussed above and request reconsideration of the claim rejections. The Commissioner is authorized to charge any necessary fees, including the \$250 Notice of Appeal fee for a small entity, or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,

Date: April 11, 2006

MCANDREWS, HELD & MALLOY, LTD.  
500 West Madison Street, 34th Floor  
Chicago, Illinois 60661  
Telephone: (312) 775-8000  
Facsimile: (312) 775-8100

  
Christopher N. George  
Registration No. 51,728  
Attorney for Applicant